

To: Chris Frissell [chris@pacificrivers.org]
Cc: DANIEL RINELLA [andjr@uaa.alaska.edu]; ebecca S Shaftel [rsshaftel@uaa.alaska.edu]
Bcc: []
From: CN=Phil North/OU=R10/O=USEPA/C=US
Sent: Tue 9/27/2011 12:03:06 AM
Subject: Re: Pebble Road
<mailto:chris@pacificrivers.org>
h.richjr22@u.washington.edu Ex. 5 - Personal Privacy
chris@pacificrivers.org
tquinn@u.washington.edu
chris@pacificrivers.org
tquinn@u.washington.edu
rinella@uaa.alaska.edu
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Ex. 5 - Deliberative

Phillip North
Environmental Protection Agency
Kenai River Center
514 Funny River Road
Soldotna, Alaska 99669
(907) 714-2483
fax 260-5992
north.phil@epa.gov

"To protect your rivers, protect your mountains."

From: Chris Frissell <chris@pacificrivers.org>
To: Phil North/R10/USEPA/US@EPA, DANIEL RINELLA <andjr@uaa.alaska.edu>
Cc: Rebecca S Shaftel <rsshaftel@uaa.alaska.edu>
Date: 09/26/2011 10:00 AM
Subject: Re: Pebble Road

Ex. 5 - Deliberative

Chris

On Sep 26, 2011, at 11:54 AM, Rebecca S ShafteI wrote:

Hi Chris,

Ex. 5 - Deliberative

Let me know.

Becky

From: Chris Frissell [mailto:chris@pacificrivers.org]
Sent: Monday, September 26, 2011 7:54 AM
To: Phil North/R10/USEPA/US; Rebecca S ShafteI; DANIEL RINELLA
Subject: Fwd: Pebble Road

fyi, here is what Harry Rich from UW sent.

Chris

Begin forwarded message:

From: "Harry Rich, Jr." [Ex. 6 - Personal Privacy]
Date: September 25, 2011 7:36:40 PM MDT
To: Chris Frissell <chris@pacificrivers.org>
Cc: Thomas P Quinn <tquinn@u.washington.edu>
Subject: Re: Pebble Road

Chris-

Attached please find a short Word.doc with a few words regarding the proposed Pebble Mine, particularly the road which would cross or come in very close proximity to several documented ADFG anadromous streams. The road will also cross or be in proximity to another 70+ streams that are not necessarily documented by ADFG as anadromous streams but are habitat for other salmonids (e.g. char, rainbow trout, grayling) and resident fishes as documented in the ADFG AFFI (Alaska Freshwater Fish Inventory).

Please be in touch if you have any further questions-

Harry Rich

On Thu, Sep 22, 2011 at 8:18 AM, Chris Frissell <chris@pacificrivers.org> wrote:
Excellent, thank you! I'll need something by Sept. 30 or so to be able to incorporate it into the report for UAA/EPA. Best,

Chris Frissell

On Sep 21, 2011, at 7:34 PM, Thomas P Quinn wrote:

Chris,

Thanks a lot for your interest in the work that Harry Rich, Jr. did regarding the streams that a road to the Pebble Site would likely cross. He did this work as part of a certificate class in GIS analysis, and so I will

let him get the report or data to you. I have the data too, however.

Richie - can you send Chris something? He is part of the team assembled by EPA to consider the possible environmental effects of the mine and associated developments.
thanks, and let me know if there are questions,
Tom

On Wed, 21 Sep 2011, Chris Frissell wrote:

I would love to roll Tom and Harry's information into my roads report. I will need it in some citable form-- even if it's

a direct personal communication. Thanks!

Chris

On Sep 21, 2011, at 2:42 PM, DANIEL RINELLA wrote:

Becky and Chris,

As long as we're on the subject of road-fish interactions, I thought I'd forward this email from Tom Quinn.

Dan

-----Original Message-----

From: Thomas P Quinn [mailto:tquinn@u.washington.edu]

Sent: Wednesday, April 13, 2011 7:09 AM

To: rinella@uaa.alaska.edu; north.phil@epa.gov; Shoren Brown

Cc: Harry Rich

Subject: Pebble Road

Dan, Phil, and Shoren,

Harry Rich, a research staff scientist with our program, worked with GIS to estimate the number of streams known to support sockeye salmon likely to be crossed or in close proximity (< 250 m) of the Pebble Mine road system. There are 21 such streams and rivers. He then went to the ADF&G aerial surveys to see what magnitude of salmon runs these support. There are various issues with aerial surveys but to make a long story short these sites make up about 22% of all the sockeye in the system, based on aerial surveys. If we include beach spawning sockeye and those in ponds closely associated with the streams (e.g., Knotson Creek's population is small but there is a very large beach spawning population there as well and probably linked to it via groundwater, etc.) the total rises to 30%.

We are still polishing the numbers and double-checking but if this sort of thing might be of value we can keep you informed. The aerial surveys are not by any means a precise way to count fish, and so these calculations are designed to determine whether the streams and rivers in proximity to the road are a substantial fraction of the system or not, and they indicate that there are lots of sockeye in them.

best wishes,

Tom

Chris Frissell, MS, PhD

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~*~

"Work hard. Always remember to Stop for a Red Flag Waving. But most of all, Stay on the Rails No Matter What."

--Tootle

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